

Title (en)
DIRECTIONAL DUAL FREQUENCY ANTENNA ARRANGEMENT

Title (de)
RICHT-DOPPELFREQUENZANTENNENANORDNUNG

Title (fr)
AGENCEMENT D'ANTENNES DIRECTIONNELLES A DOUBLE FREQUENCE

Publication
EP 1527500 A1 20050504 (EN)

Application
EP 03766545 A 20030716

Priority
• EP 03766545 A 20030716
• EP 02078154 A 20020801
• IB 0303230 W 20030716

Abstract (en)
[origin: WO2004013935A1] Using two simple antennas with different frequencies of operation combined into an antenna arrangement a directional radiation pattern is obtained for both frequencies of operation. This is achieved by placing the antennas such that the first antenna acts as a director for the second antenna at the frequency of operation of the second antenna and the second antenna acts as a reflector for the first antenna at the frequency of operation of the first antenna. In the case of a monopole antenna the the first antenna is shorter than the second antenna and can thus operate as a director while the second antenna is longer than the first antenna and can thus act as a reflector.

IPC 1-7
H01Q 21/29; **H01Q 3/24**; **H01Q 1/24**

IPC 8 full level
H01Q 19/28 (2006.01); **H01Q 1/24** (2006.01); **H01Q 3/24** (2006.01); **H01Q 5/10** (2015.01); **H01Q 9/30** (2006.01); **H01Q 21/29** (2006.01)

CPC (source: EP KR US)
H01Q 1/24 (2013.01 - KR); **H01Q 1/241** (2013.01 - EP US); **H01Q 3/24** (2013.01 - EP KR US); **H01Q 21/29** (2013.01 - EP KR US)

Citation (search report)
See references of WO 2004013935A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2004013935 A1 20040212; AU 2003249511 A1 20040223; CN 100583556 C 20100120; CN 1672293 A 20050921;
EP 1527500 A1 20050504; JP 2005535209 A 20051117; JP 4272154 B2 20090603; KR 20050026549 A 20050315;
US 2005285810 A1 20051229; US 7230579 B2 20070612

DOCDB simple family (application)
IB 0303230 W 20030716; AU 2003249511 A 20030716; CN 03818172 A 20030716; EP 03766545 A 20030716; JP 2004525670 A 20030716;
KR 20057001736 A 20050131; US 52361905 A 20050201